September 17, 2004

Mr. David O'Brien, Commissioner State of Vermont Department of Public Service 112 State Street Drawer 20 Montpelier, VT 05620-2601

Dear Mr. O'Brien:

I am responding to your letter dated June 8, 2004, to the U.S. Nuclear Regulatory Commission (NRC), in which you requested the NRC perform independent calculations as part of its review of the of extended power uprate (EPU) license amendment request from Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. for the Vermont Yankee Nuclear Power Station (VYNPS). You requested that the NRC perform calculations in three specific areas: (1) steam dryer analysis, (2) credit for containment overpressure, and (3) flow-induced vibration. As you noted in your letter, the NRC's review standard for EPUs, RS-001, Section 2.1, includes the following guidance regarding when audits and/or independent calculations should be performed:

Perform audits and/or independent calculations as deemed necessary and appropriate to support review of the licensee's application. In determining the need for performing audits and/or independent calculations, consider the following:

- confidence of the NRC staff in the models and/or methods used by the licensee
- confidence of the NRC staff in the analysis results
- familiarity of the NRC staff with the models and/or methods used by the licensee
- prior use of the models and/or methods for similar plant designs and operating conditions and the NRC staff's experience related to such use
- NRC staff experience with the impact of proposed changes on analysis results
- available margin versus level of uncertainty in analysis results
- efficiency gains that may result from performing audits and/or independent calculations

The NRC will perform independent calculations as appropriate, and in accordance with the quidance in RS-001.

You also requested that the NRC perform these calculations as part of the engineering assessment inspection. Please note that the scope of the engineering inspection does not include the performance of independent calculations.

D. O'Brien - 2 -

Thank you for informing us of your interest in our review of the Vermont Yankee EPU request. We will take your recommendations under advisement as we perform our review of the proposed EPU. A discussion of the independent calculations performed will be provided in the safety evaluation documenting our review.

Sincerely,

/RA/

Ledyard Marsh, Director Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-271

cc: See next page

Vermont Yankee Nuclear Power Station

CC:

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Mr. Michael H. Dworkin, Chairman Public Service Board State of Vermont 112 State Street Montpelier, VT 05620-2701

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Vermont Yankee Nuclear Power Station

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Mr. William K. Sherman Vermont Department of Public Service 112 State Street Drawer 20 Montpelier, VT 05620-2601 D. O'Brien - 2 -

Thank you for informing us of your interest in our review of the Vermont Yankee EPU request. We will take your recommendations under advisement as we perform our review of the proposed EPU. A discussion of the independent calculations performed will be provided in the safety evaluation documenting our review.

Sincerely,

/RA/

Ledyard Marsh, Director Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-271

cc: See next page

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